MARINE MAMMAL/VESSEL STRIKE (MMVS) WORKING GROUP
National Marine Fisheries Service NE Region, Gloucester
9:00am to 4:30pm
9 March 2004

MEETING SUMMARY

AGREEMENTS:

The group agreed that, based on historical data for whale watch vessel strikes within the SBNMS, collisions with whales can occur at any speed or time. However, those that have resulted in serious injuries or mortalities were most likely to occur when the vessel was in transit, especially on the return to port, and within 2 km of another whale suggesting that awareness and vigilance had been lower among whale watch boat crews upon completion of whale watching. The 1999 Northeast Regional Whale Watching Guideline revisions, by introducing additional speed limitations and dedicated observers, addressed these concerns.

Based on a review of historical and new information, the group agreed that the 1999 guidelines should be sufficient to substantially reduce the risk of strikes by vessels observing whales in the Sanctuary, and to reduce the severity of strikes if they do occur. However, the group agreed that based on data presented, current compliance with the guidelines' speed components within the approach and departure zones was not generally adhered to. Although the best compliance was within the close approach zone, speeds notably above those specified in the guidelines were still documented in that zone.

The group agreed that there was little information on compliance with guidelines other than speed on approach, departure, and in close proximity to whales. Gathering information on the level of compliance with all guidelines, combined with an evaluation of the role of each guideline in protecting whales from vessel strikes, is warranted.

The group agreed that anything which can be done within the whale watching industry to increase the awareness of the presence and position of whales could result in reduced risk of a strike by a whale watch vessel.

RECOMMENDATIONS:

No recommendations to the SAC were recorded at this meeting.

ACTION: **Whale watch strike data**
Several updates were made to the Whale Watch Strike Data during the course of the meeting as new information was made available to the group. The revised database should be made available to the working group members. All distance measurements should be reported in nautical miles.

ACTION: **Graph of the Greater Stellwagen Bank whale strikes**
A graph representing whale strikes (vessel speed vs. vessel length with the resultant injury to the whale identified) using the Jensen/Sibler data was presented. The same graph showing only the Greater Stellwagen Bank Whale Strikes should be prepared and presented at the next meeting, and a version where the circumstances behind each data point could be accessed would be desireable.

ACTION: **Graph of Stellwagen Bank whale density and Stellwagen Bank whale strikes**

A graph representing Stellwagen Bank whale density and Stellwagen Bank whale strikes by year should be prepared and presented at the next meeting. This may help support the correlation between heavy whale populations and whale strikes.

ACTION: **Compare whale watch effort of the Northeast region to other regions**
A better analysis of the effort within Stellwagen Bank compared to other regions would help to better evaluate the guidelines, and also to help evaluate whale strike occurrences and causes.

ACTION: **Investigate spike in vessel speed during the late 1990's**
Investigate if there is a disproportionate spike in Whale Watching vessel speed during the late 1990's?

ACTION: **Provide Whale Watching Industry with the results of the Guideline Compliance Report**
The Whale Watching Industry would like to receive information about their compliance to the Guidelines presented by Just Moller and David Wiley.

ACTION: **Guideline Compliance Study Phase II**
Phase II of the analysis of the Whale Watching Guidelines Compliance Study will investigate approach and departure compliance to the guidelines. The results should be presented to the group and made available to the industry.

Working Group Attendees

NAME	WG SEAT and AFFILIATION
Mason Weinrich	WG Chair, Whale Center of New England
David Wiley	WG Team Lead, SBNMS
Amy Knowlton	NEAq Right Whale Research, Science
Andy Glynn	General Category Tuna Association, Tuna Fishing
Bill Eldridge	Peabody Lane Shipping, Shipping
Brad Wellock	MassPort, Shipping
Brian D. Hopper	NMFS
Colleen Coogan	Independent, Conservation
David Gouveia	NMFS Protective Resources, NMFS
Erin Heskett	IFAW, Conservation
Hauke Kite-Powell	WHOI, Science
Jack Kent	MA Marine Trades Assoc., Recreational Boating
Just Moller	SBNMS, GIS Research Analyst
Karen Steuer	National Environmental Trust, Conservation
Michael Prew	Captain John Boats, Charter Boats
Mike Thompson	Perot Systems, GIS Analyst
Moria Brown	NEAq Right Whale Research, Science
Nathalie Martens	Whale Center of New England
Regina Asmutis	IWC, Conservation
Richard Meyer	Boston Shipping Association, Shipping
Rick Nolan	Boston Harbor Cruises, Shipping
Rowan Glen	Whale Center of New England
Tim Cole	NMFS NEFSC, NMFS
Tom King	Charter Boats

WELCOME, INTRODUCTIONS, AND ADOPTION OF AGENDA

Mason Weinrich (Chair) opened the meeting at 9:00am and reviewed action items from the last meeting. The agenda and an overview of the presentations of the meeting were highlighted.

OLD BUSINESS AND ACTION ITEMS

Presented by Mason Weinrich, WCNE

Review of Action Items from the last meeting on February 9th, 2004 at SBNMS, Scituate.

The Jensen/Sibler data was further explored as a continuation from the last meeting on February 9th. Using data from all areas, a plot of strikes compared to vessel speed and vessel length illustrated the results of the strikes graphically (Attachment1). Strikes were classified by the reported injuries (i.e. minor, serious, killed and unknown). Injuries that reported as none/minor should be considered as no external signs of injury. The plot suggested that collisions with vessels traveling 10 knots or less were fewer had a lower mortality rate. This could also suggest that whales were taking evasive maneuvers to get out of the way before they were struck by slower moving vessels.

The plot also illustrated that there is a lack of strikes reported between the 50 and 100 meter vessel lengths. The gap may or may not be real. It was suggested that the 50 to 100 meter vessel size may be too big for recreational boaters and too small for the commercial industry. The group recommended that it would be important to do a comparison between large and small vessel use and the strikes that occurred between each. A suggestion was made to combine Tim Cole's aerial dataset with Dave Wiley's survey dataset for the 1994/5 and 2001/2 years of available data. Some suggested that the Jensen/Sibler data should also be plotted in a similar fashion for just the whale strikes in the Greater Stellwagen Bank Region (Attachment 2). Participants also wanted to see a version of the same plot where the data behind each point could be easily accessed.

NEW BUSINESS

Scheduling of an Additional Meeting

Due to time constraints and the large number of areas still to be covered at the remaining meetings, the group decided to schedule a new meeting to be held on Tuesday May 25th. The meeting will be used to present and confirm the action plan before the recommendation to the Sanctuary Advisory Council. The location of the meeting is to be determined and will be announced at a later date.

Northeast Regional Whale Watching Guidelines Review

Presented by Dave Gouveia, NMFS & Amy Knowlton, NEAq

Dave Gouveia, NMFS & Amy Knowlton, NEAq presented an overview of Whale Watching Guidelines regarding where we are now and how we got here (Attachment 2, 4). The presentation also summarized what guidelines and regulations exist in other regions and also what led to the creation of existing guidelines. NOS and NMFS were very close to codifying the NE guidelines as regulations when they realized that they may be viewed as being arbitrary, especially since the minimum approach distance was 100 yards, as opposed to 100 feet, in many other regions.

A spreadsheet was presented illustrating the different types of regulations and guidelines for each of the whale watching regions. In some aspects the guidelines in the northeast region appear to be the most restrictive, according to several members, because they go well beyond just a minimum approach distance. It was noted that the regulations in Alaska and Hawaii were focused on the aspect of harassment rather than the issue of strike. Glacier Bay national Park was used as an example where regulations are monitored and enforced strongly by the National Park Service.

Questions arose to the similarities between Glacier Bay and Stellwagen Bank and if they could be compared. Glacier Bay is an enclosed bay where the acoustics are different, being far more highly reflective than Stellwagen. Regarding enforcement, it was noted that action are taking in Hawaii approximately 20-30 times a year, with penalties around $1,000. Better information about the regulations and enforcement in other regions could help to better understand the northeast region and what types of regulations could be considered. It would also be beneficial to look at whale watch abundance and whale density in each of the regions. A chart illustrating the whale density by year within Stellwagen Bank along with the number of strikes by year would be an interesting comparison.

Compliance with the Northeast Region Whale Watching Guidelines
Presented by Just Moller, SBNMS

Just Moller, SBNMS & Dave Wiley presented the results of a study on the ability of the Whale Watching Industry to comply with the Northeast Region Whale Watching Guidelines. abstract? ….. Funded by the International Fund for Animal Welfare (IFAW), the study was completed during the 2003 Whale Watching Season and was conducted on all of the major Whale Watching boats from all major ports. An observer accompanied the trips as a passenger with a GPS unit, placed on the stern of the boat to record the ships track, speed and timestamp, and highly sophisticated Laser range-finding binoculars to record the range and bearing of the surfacing whale sightings. The data collected was then processed and plotted in a Geographic Information System (GIS) and analyzed.

The results of the study showed that the Whale Watching Industry was out of compliance with the guidelines especially during the approaching and departure zones outside of ½ a mile. The inner zone was out of compliance ~25% of the time according to the study and the outer zones were out of compliance ~75% of the time. Other information was also recorded but not used in the study, such as vessel cruise time, mean cruise speeds, ports, etc. Phase II of the study analysis will separate the compliance of the vessel between the approach and departure of the whale watching, and to extract more detail out of the close approach zone data.

People were pleased that compliance in the inner zone, closest to whales, was ~75%. However, it was noted that speed restrictions in the outer zone were designed to protect whales that were not seen by the operator, but were likely in the area based on the often clustered distribution of animals. Compliance with the outer rings was important because in most cases whales struck by vessels were not observed prior to collision. Therefore, compliance with all zones was very important.

The Whale Watching Industry was excited that the technology was available to effectively conduct the research. They were also surprised that the study was being done, supporting that the research was unbiased with regard to knowledge of the observer on the vessel. One industry represented stated that he would like to have the data presented to his captains in order to better educate them about compliance monitoring and their performance. Several industry representatives also indicated their willingness to receive reports summarizing their compliance with the guidelines.

The study only focused on speed aspects of the guidelines; others that may reduce the risk of a vessel strike such as the use of dedicated observers and communication between vessels were not addressed.

Communication between captains may not be as strong as it has been previously. Industry representatives present indicated that there was variability in compliance with other guidelines, with some industry representatives acknowledging their lack of compliance with observer posting.

Compliance did not increase significantly until the vessel was within ½ mile of the whale. Better communication may help improve awareness and compliance by notification of whale locations. However, it was noted that, even without direct communication between captains, operators could easily ascertain that a boat was watching whales at distances over 2 miles by observing its behavior (e.g., was the vessel stopped or alternately moving and stopping). A better means of educating and posting of the guidelines could help with improving communication. Several options for familiarizing a broader audience with regulations were given. On some vessels the guidelines were posted and brochures were given out. In some cases guidelines were announced over the PA by the naturalists. A noted problem with freely posting the guidelines was that passengers were constantly accusing the captains of being too close to the whales or going to fast around them, when captains maintained they were not too close or going to fast. It was noted that, based on compliance data provided, the passengers might have been correct in at least some situations.

The slow approach guideline was produced to reduce the risk of a strike both to the focal and unseen whales. Typically, unseen whales are within two miles of seen whales; this has led to slow approach and departure zones.

Whale Watch Collision around the World: Where is the Risk?
Presented by Mason Weinrich, WCNE

Mason Weinrich, WCNE presented an updated spreadsheet of Whale Watch Strike Data around the world (attachment 3). The group reviewed the historical cases of whale strikes and also the circumstances that surrounded the incident. A comparison of the whale strikes in the greater Stellwagen Bank region and of the strikes around the world was conducted. The data excluded whales that struck stationary boats and all lengths were reported in feet. Injury was classified as; none, minor, major, serious (injury that is likely to kill) and killed. After reviewing the data it appeared that: 1) collisions with whales could take place at any time, and at any speed; 2) Strikes were approximately equal between "focal" and "non-focal" whales; 2) strikes that happened to non-focal whales, especially those in transit (and therefore at higher speeds) resulted in more serious injuries, and 4) other whales were present most of the time during transiting strikes. Transiting strikes in the greater Stellwagen Bank area occurred more often during during departure transiting. The data presented illustrates that vessels in transit present a greater risk to whales in the greater Stellwagen Bank area.

There was discussion about the number of strikes that took place in the Stellwagen region (only one) after the new guidelines were put into place. One industry representative note that the number of whales had decreased notably since that time, and the lower number of strikes may be a result. This is especially true since the majority of whales that have been present have also been further from shore; this may have made it harder to comply with the guidelines, but also meant there was less risk of a strike.

An operator's awareness of where the whales are can greatly increase or decrease the risk of strike. Awareness may be affected by the speed of the vessel and the amount of whale activity. The Whale Watching Industry suggested that awareness for captains, naturalists and observers could be decreased when there is a lower population of whales. Awareness may also decrease during the departure time and return transit because of lowered vigilance. The guidelines require dedicated spotters/lookouts on the vessel to assist the operator within two miles of a whale sighting. A dedicated lookout during the entire transiting and whale watching portions of the trip could improve awareness and reduce a whale strike. Increasing awareness by better communication could also help prevent strikes. Several modes of

improving communication was discussed by the members, including daily whale reports made available to the public by NOAA weather radio, mariner reports on VHF radio, online, and increased communication between captains. Problems with making whale sightings too easily accessible to the public could increase the amount of recreational boats rushing to the locations reported. The increased number of boats around the whales could result in problems for both the whale watching industry and raise the risk of a whale strike.

Awareness may also be affected by speed. Mathematically, a whale and a vessel can only be at one place at one time. Assuming that whales are moving at random and a vessel transited through the area at different speeds, the speed of the vessel would not increase or decrease the risk of strike. If the vessel was traveling at the same or lower speed as the whale it could increase the risk of strike. The awareness of the operators and the ability to maneuver in time to avoid a strike with increased speed may be greater than if the vessel were moving slower. Several captains suggested that there are times when higher speeds are beneficial due to increased maneuverability and the ability to route easier and escape collision. Dense fog would be an example of a time where captains may find it beneficial to have a higher speed so that they could quickly maneuver and escape a collision. Decreased speeds could force vessels to travel in a straight course to reduce travel time, where increased speeds may allow vessels to travel different routes without large time implications.

Some people felt that higher speeds helped avoid strikes by reducing the amount of time a boat was in an area. This was counter to modeling exercises conducted by a scientists at the Woods Hole Oceanographic Institute that suggested increased speed did not reduce the potential for ship strike. The model also suggested that increased speed (e.g. 15 to 25 knts) did not increase collision risk, but noted that the model assumed no evasive behavior on the part of whale or vessel.

Awareness by the whale of a vessel may decrease with speed. A video depicting two scenarios with vessels transiting near a large collection of dugongs (sea cows) in Australia was shown. During the filming of the dugongs, a vessel approached the dugongs at a slow speed. As the boat approached the dugongs they took evasive measures to avoid the boat successfully. One of the infant dugongs was separated from two of the adults and at the last moment cut back in front of the boat barely being missed. The second part of the video shows a boat traveling at a high rate of speed approaching the dugong population. As the boat approached, the dugongs did not have time to move out of the way of the boat and two dugongs appeared to be struck. The video illustrated that the dugongs would attempt evasive maneuvers, but the approach speed of the vessel did not give the animal(s) enough time to maneuver out of the way to avoid strike. The dugong may not be reacting to the speed of a vessel but rather the distance of a vessel alone. Therefore, increased speed would decrease the reaction time and awareness of the dugongs to avoid strike.

The group spent a significant amount of time crafting the agreement stated at the start of this meeting summary. It was noted that the acceptability of the agreement by the SAC, and the Sanctuary, depended upon a strong action plan to assure compliance with the guidelines, acknowledging that the industry did not want to move to regulations. Given that compliance with speed guidelines was currently very low, however, the issue needs to be addressed at a future meeting.

NEXT STEPS

Meeting Schedule and Location

A new meeting has been schedule for Tuesday May, 25th to present and confirm the action plan before submittal to the SAC.

Gerry E. Studds **Stellwagen Bank National Marine Sanctuary**

Management Plan Review

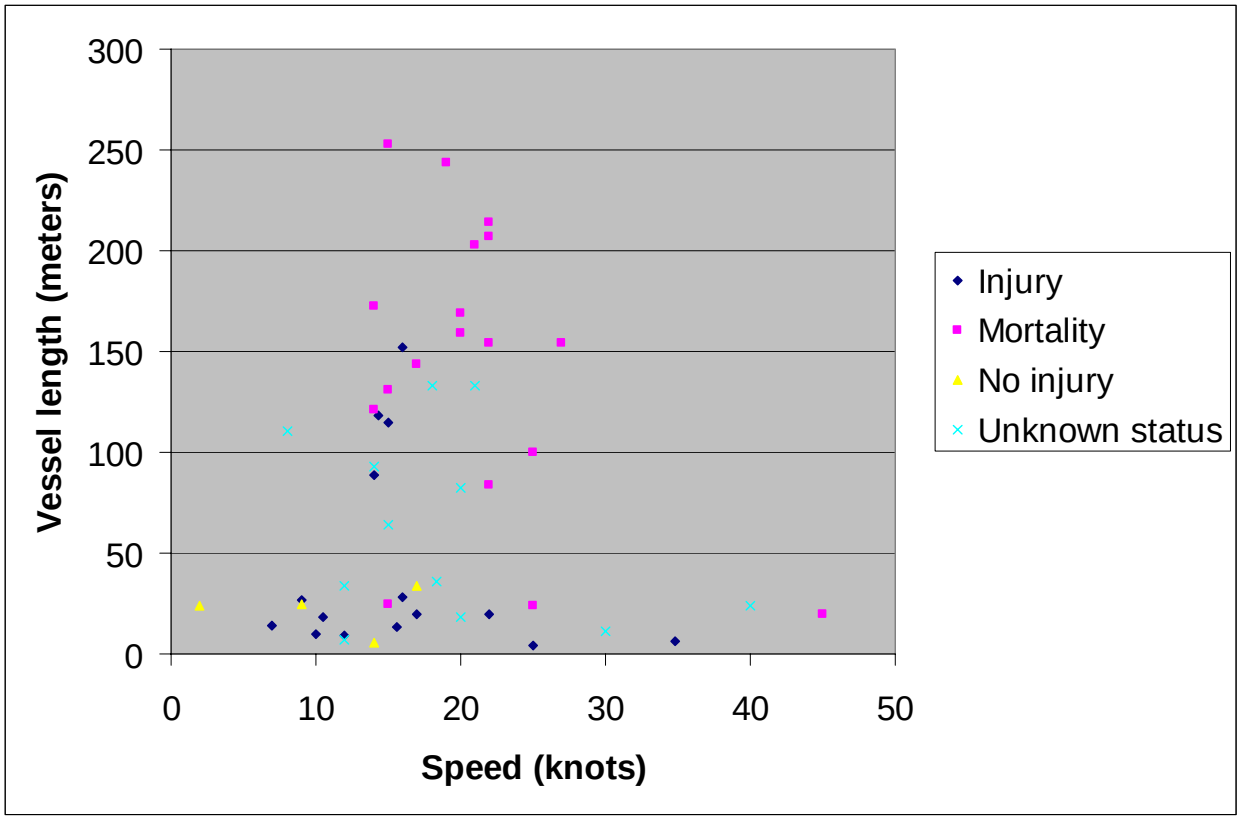
Vessel Strike Working Group – Draft Agenda

Date: 9 March 2004
Location: National Marine Fisheries Service NE Region, Gloucester

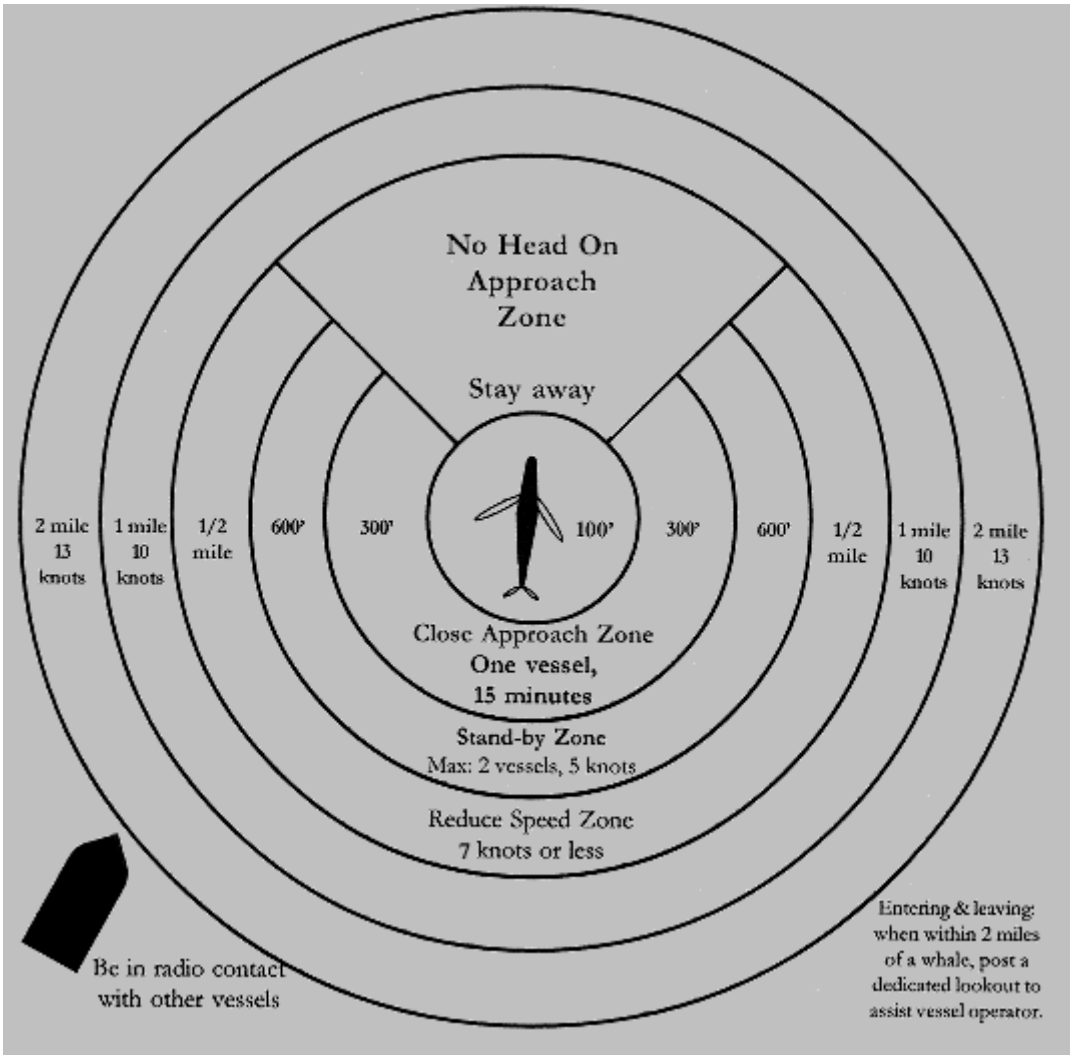
TIME	TOPICS AND OBJECTIVES
9:00-9:30	**Old Business** - Review Meeting Summary - Updates on Requested Information **Discussion Leader**: Mason Weinrich /Dave Wiley
9:30-10:00	**Presentation: Northeast regional whale watch guidelines: A review** **Presenter**: David Gouveia, NMFS
10:00-10:20	Presentation: The Whale Watch Advisory Group to the Ship Strike Committee of the Northeast Implementation Team: A review of 1999 activities **Presenter:** Amy Knowlton, New England Aquarium
10:20 – 11:00	**Presentation and discussion: Compliance with Whale Watch Guidelines in the Stellwagen Bank NMS** **Presenter:** Just Moller, SBNMS **Discussion Leader:** Mason Weinrich
11:00 – 12:15	**Discussion: Whale watch collisions around the world: Where is the risk?** A review of case histories to examine circumstances, and, if possible, common threads among cases. We will look at both cases here in New England and from other parts of the world as well. **Discussion Leader:** Mason Weinrich
12:15-12:45	**Lunch**
12:45 – 4:00	**Discussion: Management of whale watching in the SBNMS in regards to Vessel/Baleen Whale Collisions** Objectives:

	1. Synthesize and review morning presentations, 2. Discuss management options (e.g., Is status quo sufficient? If not, what additional measures might be considered?) 3 Discuss costs and benefits of various strategies and options 4. Begin formulation of draft action plan Discussion leader: Mason Weinrich
4 – 4:30	**Conclusion and looking forward** - Next Steps - Review Agreements and Data Requests

Attachment 1. Plot of vessel strike length vs. speed from the Jensen-Silber data set (courtesy of A. Knowlton)



Attachment 2. National Marine Fisheries Service northeast whale watch guidelines



Attachment 3. Data on whale watch vessel strikes from around the world as compiled by Weinrich

Date	Source	Area	Species	Age class	Vessel Type
10/4/2001	Silber	Stellwagen	Humpback	J	Head
9/12/1998	Silber	Stellwagen	Minke	unk	Head
8/12/1998	Silber	Stellwagen	Humpack	J	Cat
1/1/1998	Carlson	Stellwagen	Fin	unk	Head
6/12/1991	Silber	Stellwagen	Humpback	unk	Head
8/25/2001	Asmutis	Stellwagen	Humpback	calf	
8/1/1984	Silber/Weinrich	Stellwagen	Fin	A	Head
8/22/1985	Weinrich	Stellwagen	Humpback	J	Head
8/27/1998	Menard	Gulf of St Law.	Fin		Head
9/27/1997	Silber	Gulf of St Law.	Humpback	unk	Inflatable
9/26/1995	Silber	Gulf of St Law.	Minke	unk	Inflatable
8/14/1994	Silber	Gulf of St Law.	Fin	unk	Head
7/29/1993	Silber	Gulf of St Law.	Fin	unk	Head
6/20/1992	Silber	Gulf of St Law.	Fin	unk	Head
1/2/1995	Silber	California	Gray	unk	Head
4/4/2002	Silber	SE Alaska	Humpback	unk	Cat
2/13/2001	Silber	SE Alaska	Humpback	J	Cat
2/8/2001	Silber	SE Alaska	Humpback		Inflantable
8/11/1998	Silber	SE Alaska	Humpback		Cat
5/30/1997	Silber	SE Alaska	Unk		Head
1/1/1984	Wiley	Stellwagen	Fin	A	Head
1/16/1996	Silber	Hawaii	Humpback		Cat
2/10/2003	Lammers	Hawaii	Humpback	J	Head
3/7/2003	Lammers	Hawaii	Humpback		Head
2/1/2001	Herman et al.	Hawaii	Humpback	A	Head
2/7/2001	Herman et al.	Hawaii	Humpback		Head
7/1/1997	Fleming	Norway	Sperm	A	Head
8/11/1997	Gowans	Halifax, NS	Fin		Head
8/15/1997	Gowans	Halifax, NS	Fin	A	Head
9/1/1997	Gowans	Halifax, NS	Humpback		Head
8/1/1997	Phillips	San Juan Islands	Killer	A	Cat

Date	Boat Length	Weight	Speed	Injury?	WW or Transit?
10/4/2001	130		13	Minor	Transit
9/12/1998	110		28	Killed	Transit
8/12/1998	120		18	Serious	Leaving whales
1/1/1998	130		28	unk	Transit
6/12/1991	46		7.5	Minor	Transit
8/25/2001					
8/1/1984	100		19	Ser/Killed	Transit
8/22/1985	60		6	Minor	WW
8/27/1998	45		10	unk	leaving whale
9/27/1997			rapid	Min/Maj	Aproaching whale
9/26/1995	35		35	unk	transit
8/14/1994				Wound	WW
7/29/1993			6	Wound	WW
6/20/1992				Wound	WW
1/2/1995				Unk	
4/4/2002			0	None	WW
2/13/2001	58		17	Minor	Transit
2/8/2001	39		15.6	Min/Maj	Transit
8/11/1998	78		2	None	WW
5/30/1997	59		20	Unk	Transit
1/1/1984	80		12	Major	WW
1/16/1996	80		9	None/Minor	WW
2/10/2003				None/Minor	Transit
3/7/2003			16	Minor	Transit
2/1/2001			>18	Major	Transit
2/7/2001			>18	None/Minor	Transit
7/1/1997			5	None	WW
8/11/1997	40		5	None/Minor	WW
8/15/1997	40		0	None	WW
9/1/1997	40		0	None	WW
8/1/1997	110		5	None	WW

Date	Whale Behavior	Focal animal?	Seen prior to collision?	Other whales - 1 km?	Other whales - 2 km?
10/4/2001	Travel	n	n	n	n
9/12/1998		n	n	y	y
8/12/1998	Travel	n	n	y	y
1/1/1998		n	n	n	y
6/12/1991		unk	unk	unk	unk
8/25/2001					
8/1/1984		n	n	n	y
8/22/1985	Deep feed	n	y	y	y
8/27/1998		y	y		
9/27/1997		y	y	y	
9/26/1995		n	n		
8/14/1994					
7/29/1993		n	n	y	y
6/20/1992		y	y		
1/2/1995					
4/4/2002		y	y		
2/13/2001					
2/8/2001					
8/11/1998		y	y		
5/30/1997					
1/1/1984		n	n	y	y
1/16/1996				y	y
2/10/2003		n	n		
3/7/2003		n	n		
2/1/2001	Travel	n	n		
2/7/2001		n	n		
7/1/1997	Deep feed	y	n	y	y
8/11/1997	Trav/deep feed	y	n	y	y
8/15/1997	Deep feed	n	n	y	y
9/1/1997					
8/1/1997	Rest/Slow trav	y	n	y	y

Attachment 4 – Brian Hopper Presentation Summary

Brian D. Hopper
Marine Mammal Policy Analyst
Protected Resources Division
NMFS/NER

Whale Watching Guidelines in the Northeast Region: A Brief History
Summary of the Presentation to the Stellwagen Bank National Marine Sanctuary's
Ship Strike Working Group - March 9, 2004

Whale watching in New England originated in the mid to late 1970s, quickly becoming a popular and lucrative business. The sudden growth of whale watching in New England corresponded directly with the scientific finding that Stellwagen Bank and Jeffreys Ledge - only a one hour boat ride from the New Hampshire and Massachusetts' coasts - were a major summer feeding ground for humpback, fin, and minke whales. As the numbers of commercial and recreational vessels engaged in whale watching increased, so too did the potential for serious injury or mortality to these animals as more and more vessels maneuvered closely around the whales for the best viewing experience.

The situation out on the water did not go unnoticed, especially by those making a living whale watching who were also interested in the well-being of the animals. Therefore, in the mid 1980s, due in large part to the growing concern over the harassment of whales by small, private boaters, an ad hoc committee of whale watch naturalists, captains, and scientists was established to develop guidelines for responsible whale watching. In addition to emphasizing the need for a strong, effective public education campaign to prevent harassment, the group agreed that cooperation, communication, and self monitoring would be an important means to address the issue and, at the same time, avoid federally imposed regulations. As a result of these meetings, in 1984, with funding from NMFS, the first guidelines for whale watching in the Northeast Region were published and made available to the public.

The guidelines, which have undergone several revisions since their initial publication in 1984 (most recently in 1999), are provided in an informational brochure that contains facts on the large whales common in the Northeast, contact numbers to report entangled whales or potential violations, and the guidelines themselves. In 1986, the guidelines underwent their first revision, which was partially in response to a belief that the reduced sightings of humpbacks on Stellwagen Bank during the '86 whale watch season was related to whale watching activities[1]. Additionally, in light of the limited resources available for enforcement, revising the guidelines was perceived as the best way to address continued concerns about harassment. Moreover, it was generally agreed that more than two years were necessary to monitor compliance with the 1984 guidelines. Therefore, meetings were held between NMFS and interested parties and a

[1] It was later concluded that the lack of prey abundance on Stellwagen was the primary reason why the humpbacks were not seen in greater numbers that year.

committee was established to modifying the 1984 guidelines. The final product was a brochure entitled, “Whales of the Gulf of Maine.”

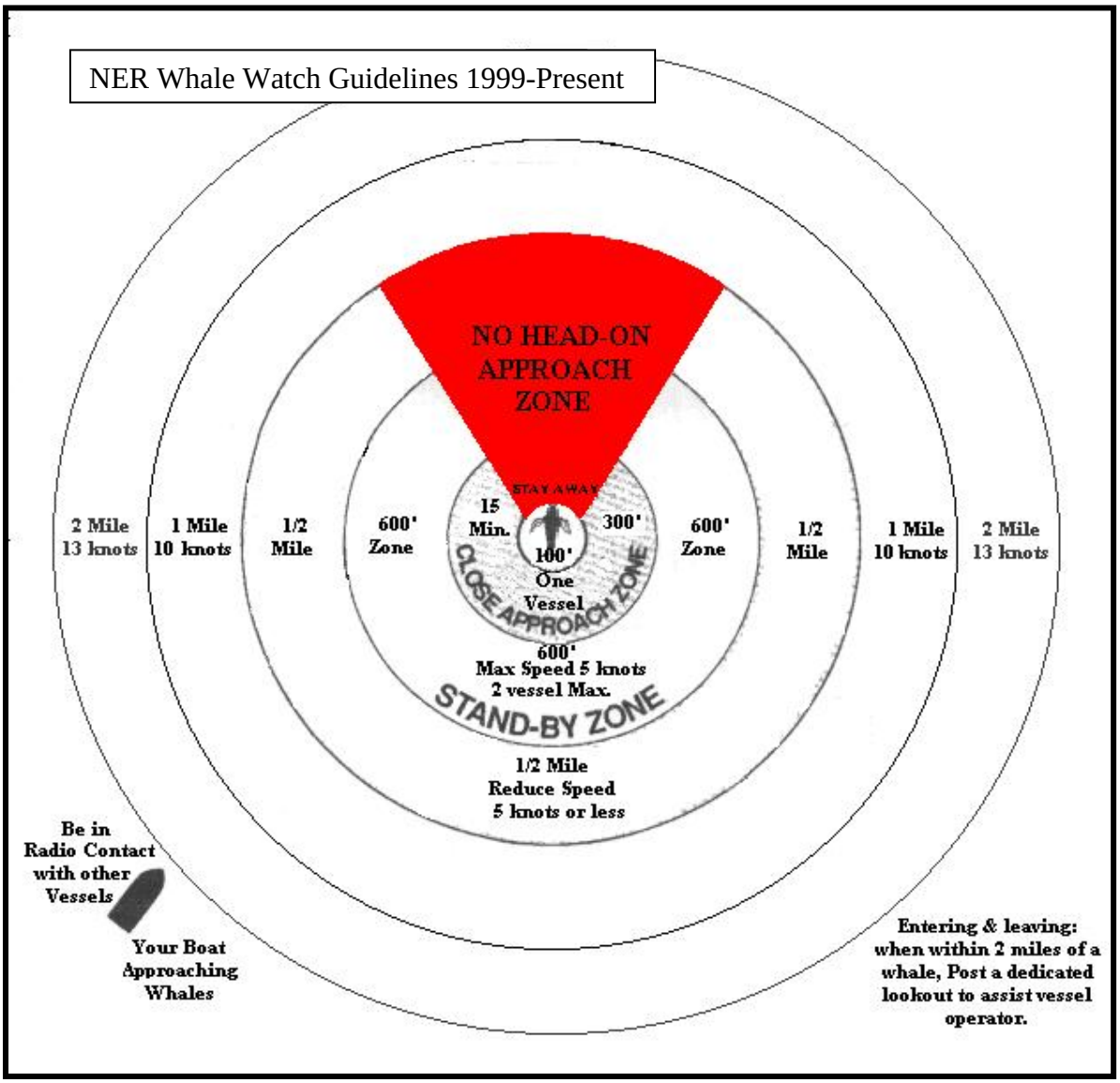
The guidelines for whale watching in the Northeast Region from 1984 -1999 were as follows:

- When in sight of whales (1500’)
  - Avoid excessive speed or sudden changes in speed or direction
- Close approach procedure (300’)
  - Approach stationary whales at no more than idle or “no wake” speed
  - Parallel course and speed of moving whales
  - Do not approach “head on”
- Multi-Vessel approach (within 300’)
  - Vessels should stay to the side or behind whales
  - Only one vessel at a time should approach within 300’ and limit viewing to 15 minutes
- No intentional approach (within 100’)
  - Do not approach within 100’ of whales
  - If whales approach within 100’, put engine in neutral and do not engage props until whales seen at the surface, clear of the vessel

More recently, the guidelines underwent a revision in 1999, in response to the increased numbers and speed of whale watch vessels and the reports of two whales being struck by whale watch vessels in 1998. The revision process was driven by the Northeast Implementation Team’s (NEIT) Ship Strike Sub-Committee, which established a Whale Watch Advisory Group (WWAG) to spearhead the effort and provide recommendations to NMFS. The WWAG was comprised of representatives from whale watch companies, conservation groups, and state and federal agencies. After holding meetings to discuss the issue, the WWAG concluded that NMFS should revise the 1984/1986 guidelines and publish an Advanced Notice of Proposed Rulemaking (ANPR) to solicit public comments on potential measures appropriate to address vessel operations around whales. Soon thereafter, NMFS published the current version of the guidelines in a brochure entitled, “Whalewatching Guidelines Northeast Region.”

The changes made in the 1999 guidelines include the following:

- Speed reductions within 2 nautical miles (nm):
  -13 kts between 1-2 nm
  -10 kts between .5-1nm
  - 7 kts .5nm or less
- Post dedicated lookouts when initiating approach/departure procedures
- Vessels should cease whale watching and begin to return to port 15 minutes before sunset



NMFS responded to the WWAG's second recommendation in 2000, when the ANPR was published in the *Federal Register*. The ANPR requested public comment on two issues: 1) Whether existing whale protection measures were adequate to address potential threats from vessels engaged in whale watching; and 2) If not, what whale protection measures are needed. In addition, several options for managing whale watch activities were identified, including further revisions to the existing guidelines (e.g., increased approach limits and/or new speed restrictions in "high use" areas), codification of the existing guidelines,
establishment of minimum approach limits similar to right whale approach rules,

and the creation of an operator permit or certification program. NMFS received 20 comments from the public during the comment period.

While the Northeast Region has focused on the non-regulatory, guidelines approach to preventing the harassment by whale watch vessels, other regions where whale watching is popular have implemented enforceable regulations that require vessels to operate a certain way around or maintain a certain distance from marine mammals under penalty of law. In 1995, Hawaii became the first region to implement federal regulations under the authority of the ESA and MMPA for approaching humpback whales[2]. Several reasons were provided to support the codification of the guidelines in Hawaii. First and foremost, there was a lack of compliance with the guidelines, which had been in place since 1979. Second, requiring vessels to stay at least 100 yards away from humpback whales (as opposed to requesting such approach limits in guidelines) would enable and improve enforcement. Third, scientists were beginning to notice that mother/calf pairs were being displaced from their seasonal calving and nursing waters by vessels engaged in whale watching. Finally, there was the general concern over the potential adverse effects from increased vessel traffic in and around Hawaii. In 2001, the Alaska Region codified there guidelines for many of the same reasons, including non-compliance with their 1996 guidelines, increased vessel traffic and whale watching, and the accessibility of localized aggregations of feeding humpback whales close to shore. Although the function and features of the habitat in Alaska and its are quite different from those in Hawaii, the Alaska Region implemented the same approach limits for vessels around humpback whales – 100 yards – as Hawaii. The attached chart compares the whale watching guidelines in the Northeast Region to those in other regions.

NMFS' involvement with whale watching stems from the agency's legal responsibilities under the MMPA and the ESA. Under those statutes, NMFS is the federal agency primarily responsible for protecting whales within U.S. waters. More specifically, the MMPA prohibits the "take" of all marine mammals. Under the MMPA, take means: " to harass, hunt, capture, or kill, or attempt to harass, hunt, capture, or kill any marine mammal." Harassment is also defined under the MMPA as: "any act of pursuit, torment, or annoyance which has the potential to injure a marine mammal or marine mammal stock in the wild; or has the potential to disturb a marine mammal or marine mammals stock in the wild by causing disruption of behavioral patterns, including, but not limited to, migration, breathing, nursing, breeding, feeding, or sheltering." The operation of vessels around whales has the potential to harass, injure, or even kill these animals, therefore, guidelines were developed to avoid harassment if complied with by vessel operators.
Attachment

Region	Species	Approach limits	Harassment	Vessel Limits	Speed Limits	Viewing Time

[2] The National Park Service has regulated vessel operation around humpback whales in Glacier Bay, Alaska since 1979; however, those rules were implemented under the authority of the Alaska National Interest Lands Conservation Act (ANILCA), which established Glacier Bay National Park.

Northeast (1999)	Mn, Bp, Ba	100 ft		2 vessels b/w 300-600’; 1 vessel b/w 100-300’	13 kts @ 1-2nm; 10 kts @ .5-1nm; 7 kts @ <.5nm; <7kts @ 600’ or less	15 min @ 100-300’
Southeast	“whales”	100 yds				30 min
Alaska* (2001)	Mn	100 yds	Unlawful to disrupt normal behavior or prior activity of a whale by any act or omission.		“slow, safe speed”	30 min
Hawaii* (1995)	Mn	100 yds	Unlawful to disrupt normal behavior or prior activity of a whale by any act or omission.		“avoid excessive speed or sudden changes in speed”	30 min

* Regulations